

**REMARKS**

Claims 1-21 are currently pending. Applicants respectfully request reconsideration of the above-identified application in light of the above amendments and the following remarks.

Claim 1 has been amended to recite that a first interruption in a weld “solely” defines a filler passage, and that a second interruption in the weld “solely” defines a drain passage. Support for these amendments is found throughout the Specification and Drawings, as filed, for example at page 1, lines 18-30 and in Figures 1-4.

Applicants’ invention as claimed in amended Claims 1-21 is directed to a pouch for packaging liquids for artificially inseminating animals. The pouch includes two thermoplastics material films welded together by a weld delimiting a pouch along a closed path of generally rectangular shape defining two shorter sides and two longer sides when the pouch is empty. The weld provides a first one of the shorter sides comprising a first interruption, which solely defines a filler passage between the thermoplastics material films. The filler passage has a generally annular neck with an outer insertion flare, adapted to receive a first tube for inserting the liquids into the pouch. The filler passage is capable of being sealed by a weld extending across the first interruption to seal the pouch after insertion through the first tube of the liquids into the pouch. The second one of the shorter sides comprises a second interruption, which solely defines a drain passage between said thermoplastic material films. The drain passage has a generally annular neck with an outer insertion flare, adapted to receive a tube for removing liquids from the pouch. The drain passage is closed by a seal that extends across the second interruption and joins the two thermoplastic material films.

Former Claims 1, 5 and 17-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,735,401 to Cassou et al. ("Cassou") in view of U.S. Pat. No. 5,391,163 to Christine et al. ("Christine").

Cassou describes a machine and pouch for doses of animal semen having a single pocket (3). The pouch described by Cassou includes a single funnel (5) and a single filler tube (4), each for the dual purpose of filling and emptying the pouch. In Cassou, a machine fills the pouch via the funnel and filler tube. The pouch is then sealed with a weld (6). When a user desires to open the pouch, the user tears the pouch beginning at the incision (8), with the tear typically traversing the weld (6), thereby opening the pouch. After this, the contents of the pouch can be emptied.

In Cassou, a dry funnel and sealing area is maintained to prevent difficulty in separating the two films when opening the pouch, since an adhesion force would be produced if even a thin film of semen existed in the sealing area. See Cassou, column 4, lines 47-53. Thus, it may be seen that the entire basis of Cassou rests on the assumption that the same passage is used for filling the pouch with semen and for emptying the pouch. Providing a second passage in Cassou is clearly contrary to the teaching of this reference.

The Office Action dated February 23, 2004, at page 2, acknowledges that Cassou "fails to disclose a second interruption on the opposite end of the first interruption in the weld." Further, Cassou does not teach or suggest a pouch with both a fill passage and a drain passage each having a generally annular neck with an outer insertion flare, adapted to receive a tube for inserting or removing liquids into or from said pouch (respectively), the filler and drain passage being capable of being sealed, or being sealed (respectively), by a weld extending across a respective interruption in a weld delimiting the pouch, as claimed in applicants' Claim 1. Thus,

Cassou is clearly deficient alone. The February 23, 2004 Office Action relies on Christine to address this acknowledged deficiency of Cassou in all of the grounds of rejection.

Christine describes a pouch for administering medical fluids. In the pouch (10) described by Christine, the portion situated between fused portions 26 and 28 does not teach or suggest “a generally annular neck with an outer insertion flare,” as claimed in amended independent Claim 1. Moreover, the passage (36/36’) of Christine, which is opposite the seam (34), is not able to receive a tube, since coupler (16/16’) would block insertion of such a tube. There is not sufficient space for receiving an additional tube. In Christine, a fluid administration set (50) communicates with the coupler (16/16’). Christine does not teach or suggest a tube being received by a filler passage having a generally annular neck with an outer insertion flare, in which the filler passage is defined by an interruption in a weld, as required by independent Claim 1.

The separate inlets and outlets of Christine each have a very different form from the other. In Christine, the pouch includes a reservoir (12) defined by two opposite heat seals (18 and 20) with a narrowing section formed at the bottom of the reservoir by angled seals (22 and 24) between which is provided a narrow channel 36, forming a drainage passage. The top of the pouch is provided with two fused portions (26 and 28) defining openings (30, 32) which allow hanging of the pouch. The top seam (34) of the pouch is provided without a seal to allow the pouch to be filled and used with “any fluid” (Christine, column 3, lines 25-28). In Christine, the entire top seam, with the exception of the fused portions (26, 28) remains unsealed until filling.

In contrast, applicants’ Claim 1 recites a pouch with both a fill passage and a drain passage each having a generally annular neck with an outer insertion flare, adapted to

receive a tube for inserting or removing liquids into or from said pouch (respectively), the filler and drain passage being capable of being sealed, or being sealed (respectively), by a weld extending across a respective interruption in a weld delimiting the pouch. Amended Claim 1 also recites that the filler and drain passages are defined "solely" by interruptions in the weld delimiting the pouch.

Christine does not teach or suggest a drain passage adapted to receive a tube for removing liquids from the pouch, as recited in Claim 1. Instead, Christine describes a lower coupler (16, 16', 16") and a sterile chamber defined by heat seals (22, 24) and peelable heat seals (38, 44). The sterile chamber defined by seals 22, 24, 38 and 44 is not a drain passage, as claimed by applicants. Unlike the drain passage as claimed, which allows liquid to pass through, the sterile chamber does not allow liquid to flow through unless it is separately opened by another means. But for the seal extending across the second interruption in the claimed drain passage, fluid can easily pass through, whereas in Christine, even when a seal 44 is opened, fluid cannot flow through because it is blocked by seal 38 of poppet 76.

When the pouch of Christine is used, either 1) the coupler is inserted through seal 38, thereby allowing fluid to flow *through the coupler* and into a fluid administration set (Christine, Figs 1-7) or 2) a poppet valve (76) is actuated thereby allowing fluid to flow *through the coupler* and into a fluid administration set (Christine, Figs. 8-12). A tube is not and cannot be inserted into the drain passage of Christine for the removal of liquid, as claimed by Applicants. Also, in neither case is the chamber defined by seals 22, 24, 38 and 44 acting as a drain passage, as claimed. Rather, the purpose of the chamber of Christine is to keep the coupler sterile until use and not to allow fluid to pass through.

Moreover, in the second embodiment of Christine, the poppet valve functions similarly to the peelable seal 38, in that it prevents fluid flow. The peelable seal 44 is only provided to maintain a sterile environment for the coupler, not to seal the pouch. The poppet valve prevents fluid flow. This is not the drain passage that is defined by applicants' claims. The sterile chamber that is shown by Christine is a closed passageway. In either of the above-mentioned embodiments of Christine, if one peelable seal (38 or 44) is opened, the other still remains sealed. As such, Christine does not teach or suggest a drain passage between said thermoplastic material films, the drain passage having a generally annular neck with an outer insertion flare, adapted to receive a tube removing liquids from the pouch, said drain passage being closed by a seal that extends across the second interruption and joins the two thermoplastic material films.

In sum, the unsealed top seam and lower coupler (16, 16', 16'') of Christine do not teach or suggest both a fill passage and a drain passage each having a generally annular neck with an outer insertion flare, adapted to receive a tube for inserting or removing liquids into or from said pouch (respectively), the filler and drain passage being capable of being sealed, or being sealed (respectively), by a weld extending across a respective interruption in a weld delimiting the pouch, or that both a filler and drain passage are defined "solely" by interruptions in the weld.

Regarding motivation to combine the teachings of Christine with those of Cassou, the Office Action argues, "... it would have been obvious to one of ordinary skill in the art to add another opening to the pouch disclosed by Cassou, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. Furthermore, it would have been obvious to add a second opening to the Cassou pouch in order to allow for

separate ingress and egress passages, as taught by Christine." See Final Office Action at page 3, lines 2-7.

However, in Cassou, since the same passage is used for filling and emptying, and the filler passage is typically deformed during the probe-insertion step, when an insemination probe is used in the same passage, it may not be held perfectly and contents may leak past the insemination probe and be wasted. If only a "mere duplication of essential working parts" were what Applicants were claiming, then Applicants' invention would necessarily be directed to (at best) an article with two pouches, each pouch comprising a single passage *for filling and emptying*, but this is not the case with Applicants' claimed invention. The claimed drain passage is sealed prior to use, while the filler passage is not sealed prior to use, but only after filling. This is simply not a "mere duplication of essential working parts," as alleged by the Office Action.

Moreover, Applicants respectfully submit that Cassou does not teach or suggest a need to include an additional opening, separate inlet passage, or a need to have an alternate means for filling the container described therein. Cassou describes the objects of his invention as providing "a ready to use dose of animal semen that avoids the use of a tool *for opening it*" and a machine for such doses. See Cassou, column 2, lines 6-13 (emphasis added). Thus, the object of Cassou is more related to *emptying* of a container rather than to filling a container.

In light of Cassou indicating that there is any undesirable aspect for use of a single passage for both filing and draining, without Christine indicating that there is any want to include any features of Cassou, further in light the Office Action's motivation for combination, Applicants submit that there is no teaching or suggestion for the combination of these references.

Even if the teachings of Cassou and Christine were properly combinable (which Applicants submit they are not), they still would not teach or suggest both a fill passage and a drain passage each having a generally annular neck with an outer insertion flare, adapted to receive a tube for inserting or removing liquids into or from said pouch (respectively), the filler and drain passage being capable of being sealed, or being sealed (respectively), by a weld extending across a respective interruption in a weld delimiting the pouch.

Even if there were a proper motivation to combine Cassou with Christine, as argued by the Office Action, a packet having the drain of Cassou, and the filler of Christine would result, *at best*. However, Christine does not teach or suggest a “filler passage having a generally annular neck with an outer insertion flare,” or a “second interruption solely defining a drain passage,” as recited in amended Claim 1. Instead, Christine teaches away from the formation of a drain passage formed due “solely” to an “interruption” in the weld of the pouch, instead preferring use of a coupler (16, 16’, 16’’). In short, the filler of Christine does not teach or suggest the claimed filler passage, and the drain of Christine does not teach or suggest the claimed drain passage.

For all of the above reasons, applicants respectfully submit that Claim 1, as amended, defines patentable subject matter over Cassou and Christine, considered alone or in combination. Claims 2-21 depend from independent Claim 1 and therefore also define patentable subject matter over Cassou and Christine, alone or in combination. Withdrawal of the rejection applied to former Claims 1, 5 and 17-19 under 35 U.S.C. §103(a) as being unpatentable over Cassou in view of Christine, is respectfully requested.

Former Claims 2-4, 8-10 and 14-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Cassou in view of Christine, further in view of U.S. Pat. No. 2,648,463 to Scherer (“Scherer”). The deficiencies of Cassou and Scherer are set forth above. Scherer does not remedy the deficiencies of Cassou or Christine in teaching or suggesting the subject matter of independent Claim 1 or of Claims 2-4, 8-10 and 14-16, which depend therefrom.

The Office Action states, “[i]t is the position of the examiner that any seal between two welded materials is “peelable.” Applicants respectfully disagree with this assertion. The term, “to weld” is defined by Merriam-Webster ([www.m-w.com](http://www.m-w.com)) as: “to unite (plastics)...by heating.” That is, the materials are not simply attached, but become one (they are “united”). Such an item is not easily “peelable,” and often is impossible without at least partially destroying a component on which a weld is formed. No true union, or weld of two materials, to Applicants’ knowledge is “peelable.”

The Office Action offers as an alternative, the teachings of Scherer to render unpatentable the subject matter of Claims 2-4, 8-10 and 14-16. The deficiencies of Cassou and Christine are set forth above. Scherer does not remedy these deficiencies. Scherer describes a plastic container with a rupturable sealed end, and has been relied upon by the Office Action for allegedly teaching a “peelable” seal. See Office Action at pages 3-4.

Scherer does not teach or suggest the claimed pouch, in-particular, Scherer does not teach or suggest a pouch having both a fill passage and a drain passage each having a generally annular neck with an outer insertion flare, adapted to receive a tube for inserting or removing liquids into or from said pouch (respectively), the filler and drain passage being capable of being sealed, or being sealed (respectively), by a weld extending across a respective

interruption in a weld delimiting the pouch, as recited in independent Claim 1. Accordingly, even if Scherer were combined with Cassou and Christine, all of the claimed features would not be taught or suggested.

For at least the foregoing reasons, Applicants respectfully submit that Independent Claim 1 and all claims depending therefrom define patentable subject matter over Cassou, Christine and Scherer, considered alone or in combination. Withdrawal of the rejection applied to Claims 2-4, 8-10 and 14-16 under 35 U.S.C. §103(a) as being unpatentable over Cassou in view of Christine, further in view of Scherer, is respectfully requested.

Claims 11-15 and 20-21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Cassou in view of Christine, further in view of U.S. Pat. No. 4,804,363 to Valeri (“Valeri”). The deficiencies of Cassou and Christine are set forth above. Valeri does not remedy these deficiencies. Valeri describes an apparatus for storing and processing blood, and has been relied upon by the Office Action for allegedly teaching “a marking area.” See Office Action at page 5.

Valeri does not teach or suggest the claimed pouch, in-particular, Valeri does not teach or suggest a pouch having both a fill passage and a drain passage each having a generally annular neck with an outer insertion flare, adapted to receive a tube for inserting or removing liquids into or from said pouch (respectively), the filler and drain passage being capable of being sealed, or being sealed (respectively), by a weld extending across a respective interruption in a weld delimiting the pouch, as recited in independent Claim 1. Accordingly, even if Valeri were combined with Cassou and Christine, all of the claimed features would not be taught or suggested.

For at least the foregoing reasons, Applicants respectfully submit that Independent Claim 1 and all claims depending therefrom define patentable subject matter over Cassou, Christine and Scherer, considered alone or in combination. Withdrawal of the rejection applied to Claims 11-15 and 20-21 under 35 U.S.C. §103(a) as being unpatentable over Cassou in view of Christine, further in view of Valeri, is respectfully requested.

**CONCLUSION**

In light of the foregoing, Applicants respectfully submit that all claims, as currently presented, define patentable subject matter over the cited art, considered alone or in combination. An early Notice of Allowance is earnestly solicited.

Respectfully submitted,



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